

ABSTRACT

When discrimination is made for each predetermined period whether an input signal is a speech signal or a non-speech signal, the discrimination is made using a single algorithm even if the input signal has several frequency bands and several period lengths.

A unit length dividing circuit 20 divides the signal inputted from an input terminal 10 into unit lengths (for example, 2.5 msec) shorter than a frame length (for example, 10 msec) and passes them to a band conversion circuit 30. The band conversion circuit 30 limits the frequency band of the input signal divided into frames of a predetermined length and passed by the unit length dividing circuit 20, to a frequency band that can be checked by a checking circuit 40 and passes the signal to the checking circuit 40. The checking circuit 40 makes a discrimination between speech and non-speech periods for each of the short periods passed by the unit length dividing circuit 20 and passes the result for each frame of the input signal to a unit length conversion circuit 50. The unit length conversion circuit 50 gives a result for each frame, based on the multiple results which correspond to the each frame and which were passed by the checking circuit 40, and outputs it from an output terminal 60.